## REMARKS

**Foreign Priority:**

Applicant thanks the Examiner for acknowledging Applicant's claim to foreign priority under 35 U.S.C. §119(a)-(d), and for confirming that the certified copy of the priority document has been received at the Patent Office.

**Drawings:**

Applicant thanks the Examiner for indicating that the drawings filed with the present application have been approved.

**Information Disclosure Statement:**

Applicant thanks the Examiner for initialing and returning the Forms PTO/SB/08 A & B filed on February 25, and October 6, 2004, thus indicating that all of the references listed thereon have been considered.

**Specification:**

The Examiner has objected to the specification, indicating that the term "sonobuoies" is erroneously used in the present application. As shown in the previous section, Applicant has made the appropriate correction, and hereby requests the Examiner reconsider and withdraw the above objection.

**Claim Rejections:**

Claims 1-8 are all of the claims that have been examined in the present application, and currently all of these claims stand rejected.

***35 U.S.C. § 103(a) Rejection - Claims 1-8***

Claims 1-8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 4,746,924 to Lightfoot in combination with WO 97/22889. In view of the following discussion, Applicant respectfully traverses the above rejection.

Applicant has reviewed the prior art referenced above and submits that this prior art has little or no relevance to the claimed invention. Further, Applicant submits that even if the references were combined as suggested by the Examiner (which Applicant does not admit would have been obvious) the resultant combination would fail to teach or suggest each and every feature of the claimed invention.

Specifically, Lightfoot is directed to a system and method which determines the position of an object (i.e. a hostile aircraft 24), by using a signal transmitted from a non-cooperative source, such as a second hostile aircraft 22. This has little or no relevance to the present invention.

In Lightfoot, the detecting aircraft 20 receives a signal that has been directly emitted from a illuminating aircraft 22. Additionally, the aircraft 20 receives signals that have been illuminated from the illuminating aircraft 22 that have been reflected by the target aircraft 24. Lightfoot then uses these two received signals to determine the locations of the illuminating and target aircraft.

> Locating the positions of the target 24 and illuminator 22 is accomplished by determining a time differential $\Delta t$ between receipt at receiver 20 of signals generated from illuminator 22 which are received directly therefrom, ..., as well as corresponding signals which have been generated from illuminator 22 and reflected from target 24 ... Lightfoot, Col. 6, lines 47-54.

In view of the foregoing, Applicant notes that there are a number of distinctions between Lightfoot and the present invention, which are not cured by the WO '889 reference.

First, in Lightfoot, none of the aircraft (i.e. the detection aircraft 20, the illuminator 22, or the target 24) are emitting signals which contain location information. In the present invention, each of the sound source equipment and the wave receiving equipment transmit position information, on the respective equipment. This is neither disclosed or suggested in Lightfoot. In fact, Lightfoot is directed to using the signals from a non-cooperative (i.e. hostile) source. As such, the illuminator 22 would not be transmitting any location information, which would identify its position. Further, there is no disclosure or teaching of the target aircraft 24 emitting any location information. Again, because the target 24 is a hostile target, it would not transmit a location signal of any kind.

Second, in the present invention, both the sound source equipment and the wave receiving equipment send signals. The sound source equipment transmits a sound wave to a target and position information, and the wave receiving equipment also transmits position information with a received wave signal. However, in Lightfoot, only one aircraft is sending a signal, i.e. the illuminating aircraft 22.

In Lightfoot, the goal is to determine the location of the target 24, by remaining passive. Stated differently, the detecting aircraft 20 remains passive so that it does not emit any signals, which could be detected, thus giving away its position. Further, in Lightfoot, the target 24 is also not emitting any signals in an effort to avoid revealing its location. Because of this, there is only one emission device (illuminator 22) disclosed in Lightfoot.

As indicated above, the present invention comprises at least two emission devices, a sound source equipment and a wave receiving equipment. This is simply not disclosed in any of the above cited prior art.

Third, there is no disclosure that the illuminating aircraft 22 emits more than one type of signal. In the present invention, the sound source equipment emits a sound wave and position information. Lightfoot only discloses that the aircraft 22 emits a single signal, and regardless of the Examiner's comments, it would not have been obvious to cause the aircraft 22 to emit a sound wave, as such emissions in air-to-air applications are impractical.

Fourth, because there is no disclosure of a wave receiving equipment which transmits position information (see the discussion above), Applicant submits that there is also no disclosure of the claimed sound source detection device or means, calculation device or means, or target azimuth detection device or means, which use (directly or indirectly) the position information from the wave receiving equipment to determine an azimuth of the sound source equipment and the target.

In view of the foregoing, Applicant respectfully submits that one of ordinary skill in the art would not have been motivated to combine the above references as suggested by the Examiner, and even if one combined the references as suggested the resultant combination would fail to disclose, teach or suggest each and every feature of the claimed invention. Therefore, Applicant submits that the Examiner has failed to establish a *prima facie* case of obviousness with respect to the claimed invention, as required under 35 U.S.C. § 103(a). Accordingly, Applicant hereby requests the Examiner reconsider and withdraw the above 35 U.S.C. § 103(a) rejection of the claims.

**New Claims:**

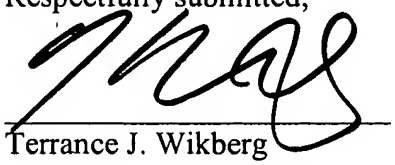
Applicant has added new claims 9-16 to further claim the present invention, and submits that these claims are allowable for the same reasons as discussed above regarding claims 1 to 8.

**Conclusion:**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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Date: October 6, 2005